4-bromo-l-chlorobutyl boronate pinacol

(II)
$$Br-(CH_2)_3-CH-B$$
O

Si Si
 $/|//|$
Distillation

4-bromo-l[(bistrimethylsilyl) amino] butyl bornonate pinacol

1-trimethylsilyl-boroProline pinacol bo

boroProline-pinacol-HCL

4N HC1
Boc-Ala-boroPro-pinacol Dioxane → Ala-boroPro-pinacol

$$H_{2}N + N + (CH_{2})_{\overline{n}}C - N + B$$

$$H_{2}N + NH_{2}N = 1-3$$

$$H_{2}N + C - N + B$$

$$H_{3}N + C - N + B$$

$$H_{4}N + C - N + B$$

$$H_{5}N + C - N + B$$